

Book review

Taylor, JD (Editor). 1996. *Origin and Evolutionary Radiation of the Mollusca*. Oxford University Press. ISBN 0 19 854980 6.

The Malacological Society of London is one of the oldest and most respected such societies in the world, best known for its publication of the *Proceedings of the Malacological Society of London*, reformatted in recent years as the *Journal of Molluscan Studies*. The Society celebrated its centenary in September 1993 with a symposium on the "Origin and evolutionary radiation of the Mollusca" held at the Natural History Museum in London. The present book is a compilation of some of the papers presented at the symposium.

The last 20 years has seen a considerable increase in research into the origin and evolutionary radiation of the Mollusca as new techniques in cladistic analysis and molecular methods became available and routinely applied. Results obtained from these studies led to a reappraisal of both old and new data obtained from anatomical studies and examinations of the fossil record. The result has been a dynamic re-evaluation of our understanding of the origin of the Mollusca and the evolutionary paths undertaken by groups within the molluscs.

The centenary symposium brought together leading malacologists from throughout the world to present the results of their work and to discuss the issues raised. The resulting volume does not give final answers, but rather appears as an up to date snapshot of our understanding at the moment. Evolutionary papers presented at the Unitas meeting in Vigo last (northern) summer showed that research in this field is actively continuing.

Papers in the book are grouped into three sections. The first section of ten papers discusses relationships between molluscs and other phyla (Turbellaria, Annelida, Sipuncula) or relationships at higher taxonomic levels. Papers on molluscan groups utilise a variety of approaches, including comparative anatomical studies of shell pores, sperm ultrastructure, phylogenetic analysis, the fossil record and biogeography.

The second, and largest, section of 27 papers examines gastropods from a variety of viewpoints. The first paper, by Ponder and Lindberg, reviews our current understanding of gastropod phylogeny and outlines an approach for future studies. Several papers examine general characters of gastropods or higher taxa within the Gastropoda such as the significance of cleavage patterns for reconstructing gastropod phylogeny, initial radiation of the Archaeogastropoda, lepetid limpets, trochoideans, stylommatophorans, and neogastropods. Other papers examine in detail groups at the family or lower level, including Cypraeidae, the *Littorina saxatilis* complex, sacoglossans, *Haminaea navicula*, Clausiliidae, Ellobiidae, *Albinaria*, and *Calliostoma zizyphinum*. One paper contrasts developmental strategies and speciation in prosobranchs. This section contains a wealth of information at all levels within the group.

The final, and shortest, section brings together three papers on bivalves and a short one on scaphopods. The first two contributions on bivalves discuss the evolution of the class, and the third examines the phylogenetic significance of anatomical features of bivalve veligers.

There are no papers on the other molluscan classes. To a large degree this absence probably reflects the relative lack of work in them.

The book is superbly produced, and a substantial credit to the symposium organiser and volume editor, John Taylor of the Natural History Museum. It is a landmark contribution to malacology and will be heavily used by researchers examining many aspects of the biology of molluscs, particularly evolutionary studies.

Fred E Wells